CLAIMS:

1. An electrode for nonaqueous electrolyte secondary batteries characterized by having an output terminal attached to a surface of the electrode at a position corresponding to a position, in viewing along the thickness direction of the electrode, where an active material layer exists.

2. The electrode for nonaqueous electrolyte secondary batteries according to claim 1, wherein an active material contained the active material layer comprises a material having low electroconductivity.

3. The electrode for nonaqueous electrolyte secondary batteries according to claim 1, comprising a pair of current collecting surface layers and at least one active material layer interposed between the surface layers, the surface of each of the surface layers being adapted to be brought into contact with an electrolyte, the active material layer containing a particulate active material having high capability of forming a lithium compound, wherein the output terminal is attached to the surface of the current collecting surface layer.

4. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein the active material layer has a metal material having low capability of forming a lithium compound and penetrating the interstices between the particles of the active material to provide an electrical connection between the two surfaces of the electrode such that the electrode has a current collecting function as a whole.

5. The electrode for nonaqueous electrolyte secondary batteries according to

claim 3, wherein the surface layers each have a thickness of 0.3 to 10 μm.

6. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein at least one of the surface layers has micropores extending in the thickness direction thereof, the micropores being configured to allow a nonaqueous electrolyte to penetrate therethrough.

7. The electrode for nonaqueous electrolyte secondary batteries according to claim 6, wherein the micropores lead to the active material layer, the micropores of at least one of the surface layers have an average open area of 0.1 to 50 μm^2 and an open area ratio of 0.1% to 20%, and a thick conductor for current collection is absent from the electrode.

8. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein the surface layers are formed by electroplating.

9. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein each of the surface layers contains a metal material having low capability of forming a lithium compound.

10. The electrode for nonaqueous electrolyte secondary batteries according to claim 9, wherein the metal material having low capability of forming a lithium compound contained in the surface layer is different from a metal material having low capability of forming a lithium compound penetrating in the active material layer.

11. The electrode for nonaqueous electrolyte secondary batteries according to claim 9, wherein the metal material having low capability of forming a lithium

compound contained in the surface layer is the same as a metal material having low capability of forming a lithium compound penetrating in the active material layer.

12. The electrode for nonaqueous electrolyte secondary batteries according to claim 9, wherein at least one of the surface layers has a multilayer structure having two or more sublayers, and at least one of materials making up the respective sublayers is different from a metal material having low capability of forming a lithium compound penetrating in the active material layer.

13. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein the particulate active material comprises particles of a silicon material or particles of a tin material.

14. The electrode for nonaqueous electrolyte secondary batteries according to claim 3, wherein the electrode further comprises an electroconductive metal foil in the middle of the thickness direction thereof as a core, the active material layer is present on both sides of the metal foil, the current collecting surface layers are each adjacent to the respective active material layers, and the total thickness of the electrode is 10 to 100 μm.

15. The electrode for nonaqueous electrolyte secondary batteries according to claim 1, which is a negative electrode.

16. A process of producing the electrode for nonaqueous electrolyte secondary batteries according to claim 3, the process comprising the steps of:

applying an electroconductive slurry containing a particulate active material to

a carrier foil to form an active material layer,

immersing the carrier foil with the active material layer in a plating bath to conduct electroplating to form a surface layer on both sides of the active material layer,

peeling the carrier foil off one of the surface layers to obtain an electrode, and

attaching an output terminal to one of the surface layers.

17. A process of producing the electrode for nonaqueous electrolyte secondary batteries according to claim 3, the process comprising the steps of:

electroplating one side of a carrier foil to form a first current collecting surface layer,

applying an electroconductive slurry containing a particulate active material to the first surface layer to form an active material layer on the active material layer,

electroplating the active material layer to form a second current collecting surface layer on the active material layer,

peeling the carrier foil off the first current collecting surface layer to obtain an electrode, and

attaching an output terminal to one of the current collecting surface layers.

18. The process according to claim 17, further comprising forming a coat of a material different from the material constituting the first current collecting surface layer on the one surface of the carrier foil to a thickness of 0.001 to 1 μm before forming the first current collecting surface layer.